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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,303	12/26/2000	Tsutomu Sasaki	001715	2061

23850 7590 01/28/2003

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EXAMINER

ELLIS, KEVIN L

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 01/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,303

Applicant(s)

Sasaki et al.

Examiner

Kevin L. Ellis

Group Art Unit

2188

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 11/6/02
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-4 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-4 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Detailed Action

1. Claims 1-4 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 USC § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. Claims 1-4 are rejected under 35 USC § 103 as being unpatentable over Robinson et al., U.S. Patent 5,428,579, in view of Kawasaki et al., U.S. Patent 6,332,196.

A) As to claims 1, 2, and 4, Robinson et al. discloses the invention substantially as claimed. There is a memory card that can operate under two current consumption modes, an active and standby mode (see Col 2 Lines 6-12 and Line 50 to Col 3 Line 49). The memory card operates in the active mode when is being read or written to the card and in the standby mode when no operation is occurring to the memory card. This results in the same power savings as the present invention. However, Robinson et al. does not disclose the buffer memory that data is read into and that when the amount of data stored in the memory falls below a threshold the memory card is then operated in the active mode.

Kawasaki et al. teaches a buffer that is utilized similarly to the claimed buffer. The buffer of Kawasaki et al. stores data from a disk drive and when the buffer contains sufficient data the drive is operated in a lower power mode. When the amount

of data falls below a threshold the drive is operated in an active mode and data is read into the buffer (see Abstract and Col 3 Lines 5-45). Accordingly it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Kawasaki et al. in the system of Robinson et al. and provide a buffer between the memory card and the requestor of the data. The powering up and down of the memory card would operate in a manner similar to that taught by Kawasaki et al. When there is sufficient data in the buffer the memory card can be powered down, when the amount falls below a threshold the memory card would be powered up and data read into the buffer. This arrangement would provide power savings because the amount of time the memory card operated in a powered on state would be decreased.

- B) As to claim 3, Robinson et al. teaches setting the memory card in the standby mode when there is no memory access within a predetermined period of time (see Col 16 Lines 16-24).

Response to Argument

4. Applicant's arguments filed 11/6/02 have been fully considered but they are not deemed to be persuasive.
5. Applicant's argue that Kawasaki et al. teaches only one powered state whereas the present invention has two power on states. Claim 1 recites: "an active mode is set for reading out the data under a current consumption of a first value in response to memory access of data reading and thereafter automatically follows to a standby mode for waiting for next memory access under a current consumption of a second current value lower than the first current value" (Lines 8-14). Kawasaki et al. teaches an active mode when the device is powered on and teaches the "standby mode" that operates at "a second current value lower than the first current value". Clearly when the R/W circuit of Kawasaki et al. is powered off the current

value will be lower than the first current value. Furthermore operating the device in a low power mode would have been obvious and readily apparent to one having ordinary skill in the art depending upon the type of memory device used. If the memory device is such that being powered off destroyed the contents of the memory, then a low power mode would be used, or if the device had volatile control registers then the device couldn't be powered down either and would have to operate in a low power mode. Kawasaki et al. teaches operating the device in an active state when it's being accessed and otherwise placing the device in a standby mode to conserve energy when not being accessed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin Ellis whose telephone number is (703) 305-9659. The Examiner can normally be reached on the weekdays from 6:00am to 2:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matt Kim, can be reached on (703) 305-3821.

Any response to this action should be mailed to:

Serial Number: 09/745,303
Art Unit: 2188

- 5 -

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:
(703)746-7239, (for formal communications intended for entry)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Kevin L. Ellis
Primary Examiner
January 23, 2003

Kevin L. Ellis